

A network switch having at least one port data port interface, a first memory, a second memory, and a memory management unit in connection with the at least one data port interface, the first memory, and the second memory. The memory management unit operates to receive data from the at least one data port interface, determine if the data is to be stored in one of the first memory or the second memory, store the data in one of the first memory or the second memory as a linked list, retrieve the data from one of the first memory or the second memory, and forwards the data for egress.